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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/581,207

Applicant(s)

MAYER ET AL.

Examiner

TIMOTHY PHAM

Art Unit

2617

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-11,13-19,21-26,34 and 37-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-11,13-19,21-26,34,37-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. The applicants admitted to elect the claims of group I for prosecution on the merits; however, after reviewing the Applicant's arguments filed 09/25/2009, the claims 1, 3-11, 13-19, 21-26, 34, 37-47 have been fully considered and are persuasive. The election/restrictions filed on 09/15/2009 have been withdrawn. Therefore, claims 1, 3-11, 13-19, 21-26, 34, 37-47 are pending in this application.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 3-11, 13-19, 21-26, 34, and 37-47 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 44-45 and 47 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims are drawn to a "computer readable medium" comprising stored data. In the state of the art, transitory signals are commonplace as a medium for transmitting computer instructions and thus, in the absence of any evidence to the contrary and given the broadest reasonable interpretation, the scope of a "computer readable medium" covers a signal per se. A transitory signal does not fall within the definition of a process, machine, manufacture, or a composition of matter; therefore, claims 44-45, and 47 do not fall within a statutory category.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 25-26, 37-39, 43, and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Herrero (US 2005/0009520; Part of Paper No. 20080912).

Regarding claims 25-26, and 43, Herrero discloses an apparatus and a method, comprising:

a controller configured to determine that a first network element in a communications network is out of service by sending a request to the first network element from the apparatus (Fig. 2, step 1; paragraphs [0073], [0075], e.g., In step 1 of FIG. 2 said user sends a registration request REGISTER, from terminal UE to the first-contact-point server entity P-CSCF that is serving the access of said UE to said system) and determining that no response has been received from the first network element at the apparatus (paragraphs [0136], [0144], e.g., (time-out), or a negative response have been received (e.g.: a SIP response code "4XX")), and

when the first network element is determined to be out of service, drop a bearer configured to signal between the apparatus and a communications network comprising the first network element paragraph [0135], e.g., the I-CSCF can tear down the session requests it had sent to the other S-CSCFs (e.g.: sending a SIP cancel request "CANCEL" to said S-CSCFs)),

discover or select at the apparatus a second network element (paragraphs [0077], [0105]), and send from the apparatus to the second network element a message comprising an initial request for registration at the communications network (paragraphs [0077], [0105], noted the re-register message).

Regarding claim 37, Herrero discloses the apparatus according to claim 25, wherein the bearer comprises a signalling or general purpose packet data protocol context bearer (paragraphs [0033], [0072], e.g., the registering UE runs to get a radio bearer packet-based).

Regarding claim 38, Herrero discloses the apparatus according to claim 26, wherein the bearer comprises a signalling or general purpose packet data protocol context bearer (paragraphs [0033], [0072], e.g., the registering UE runs to get a radio bearer packet-based).

Claim 45 is drawn to a computer readable medium configured to store instructions of a computer program that when executed controls a controller to perform steps of claim 25 above. Therefore, the same rationale applied to claim 25 applies. In addition, Herrero inherently discloses a computer program product, i.e., given that Herrero discloses a process, the process would be implemented by a processor that requires a computer program product, e.g., a RAM, to function.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3-11, 13-15, 17, 19, 21-24, 34, 39-42, 44, and 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrero in view of 3GPP (cited in PTO-892; Part of Paper No. 20080912).

Regarding claims 1, 19, 21, 34, 39, 41-42, Herrero discloses a method, an apparatus, a system, comprising:

receiving at a first network element in a communications network a first message from a user equipment (Fig. 2, step 1; paragraphs [0073], [0075], e.g., In step 1 of FIG. 2 said user sends a registration request REGISTER, from terminal UE to the first-contact-point server entity P-CSCF that is serving the access of said UE to said system);

transmitting the first message from the first network element to a serving network element (Fig. 2, step 2; paragraph [0075], e.g., it then forwards the REGISTER to an interrogating server entity I-CSCF, wherein the P-CSCF has added information related to itself as being the first contact point server entity P-CSCF serving the access of said UE);

detecting at the first network element that the serving network element is out of service (paragraphs [0136], [0144], e.g., (time-out), or a negative response have been received (e.g.: a SIP response code "4XX")),

wherein determining the type of the first message comprises evaluating content of a predefined information element in the first message (paragraph [0069], e.g., The detailed content of the messages (queries, responses, notifications, etc.) exchanged through the so called "CX reference point" between any of the so called Call State Control Functions (or CSCFs)),

subsequent to sending the error message to the user equipment, receiving a second message from the user equipment of a second type different from the first message type (paragraphs [0077], [0105], noted the re-register message).

Herrero fails to specifically disclose determining at the first network element a type of the first message; in dependence on the determined type of the first message, sending from the first network element to the user equipment an error message including an indication that the serving network element is out of service.

However, 3GPP discloses determining at the first network element the type of the first message (page 18, section 2, note that the “SIP request” is acknowledge by the “SIP Response”); in dependence on the type of the first message sending from the first network element to the user equipment an error message including an indication that the serving network element is out of service (page 18, section 2 and Fig. 5.6, reference “SIP Response”, e.g., in case of failure an appropriate SIP error message is returned); and

Therefore, taking the teachings of Herrero in combination of 3GPP as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to have determining at the first network element the type of the first message; and in dependence on the type of the first message sending from the first network element to the user equipment an error message including an indication that the serving network element is out of service, and subsequent to sending the error message to the user equipment to enhance managing communications over a network.

Regarding claim 3, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the second message is configured to initiate a registration from the user equipment to the first network element (Herrero: paragraphs [0077], [0105]).

Regarding claim 4, Herrero in combination with 3GPP discloses the method according to claim 1, wherein a bearer configured to signal is established between the user equipment and the communications network prior to the receiving of the first message (Herrero: paragraphs [0033], [0072], e.g., the registering UE runs to get a radio bearer packet-based).

Regarding claim 5, Herrero in combination with 3GPP discloses the method according to claim 4, further comprising forwarding the first message to a further serving network element (Herrero: Fig. 2, step 2; paragraph [0075]).

Regarding claim 6, Herrero in combination with 3GPP discloses the method according to claim 5, wherein the further serving network element registers the user equipment (Herrero: paragraph [0075], e.g., in step 2 of FIG. 2, it then forwards the REGISTER to an interrogating server entity I-CSCF, wherein the P-CSCF has added information related to itself as being the first contact point server entity P-CSCF serving the access of said UE).

Regarding claim 7, Herrero in combination with 3GPP discloses the method according to claim 4, wherein the bearer comprises a signalling or general purpose packet data protocol context bearer (Herrero: paragraphs [0033], [0072], e.g., the registering UE runs to get a radio bearer packet-based).

Regarding claim 8, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the communications network is an internet protocol multimedia subsystem network (Herrero: paragraphs [0014], [0019], e.g., IMS).

Regarding claim 9, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the first network element comprises an interrogating call session control function (Herrero: paragraph [0049], e.g., I-CSCF).

Regarding claim 10, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the first network element comprises a proxy call session control function (Herrero: paragraph [0048], e.g., P-CSCF).

Regarding claim 11, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the serving network element comprises a serving call session control function (Herrero: paragraph [0050], e.g., S-CSCF).

Regarding claim 13, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the detecting at the first network element that the serving network element is out of service comprises:

at least one of detecting that a predetermined time period has passed since the forwarding of the message from the first network element to the serving network element and before a response has been received from the serving network element (Herrero: paragraphs [0136], [0144], e.g., the I-CSCF can, for instance, set a timer of a pre-defined value when it sends the INVITE to a first S-CSCF; so, once a given period of time has elapsed without receiving said

positive response (time-out), or a negative response have been received (e.g.: a SIP response code "4XX"), it shall forward the INVITE to a second S-CSCF, etc.), and

determining that the first message has been transmitted a predetermined number of times (3GPP: page 26; sections 5.1.2.2.1 in its entirety).

Therefore, taking the teachings of Herrero in combination of 3GPP as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to determine that the first message has been transmitted a predetermined number of times for the advantages of promptly taking the appropriate action.

Regarding claim 14, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the type of the first message comprises a re-registration request (Herrero: paragraphs [0077], [0105], noted the re-register message).

Regarding claim 15, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the type of the second message comprises an initial registration request (Herrero: paragraphs [0077], [0105]).

Regarding claim 17, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the information element indicates that a user has been successfully authenticated (Herrero: paragraphs [0072], [0092]).

Regarding claim 22, Herrero in combination with 3GPP discloses the apparatus according to claim 21, wherein the controller is further configured to establish a bearer configured to signal between the apparatus and a communications network (Herrero: paragraphs [0033], [0072], e.g.,

the registering UE runs to get a radio bearer packet-based) comprising said first network element and said serving network element, and

respond to the error message by dropping the bearer between the apparatus and the communications network ((Herrero: paragraph [0135], e.g., the I-CSCF can tear down the session requests it had sent to the other S-CSCFs (e.g.: sending a SIP cancel request "CANCEL" to said S-CSCFs)).

Regarding claim 23, Herrero in combination with 3GPP discloses the apparatus according to claim 22, wherein the bearer comprises a signalling or general purpose packet data protocol context bearer (Herrero: paragraphs [0033], [0072], e.g., the registering UE runs to get a radio bearer packet-based).

Regarding claim 24, Herrero in combination with 3GPP discloses the apparatus according to claim 21, wherein the type of the further message sent to the first network element comprises an initial registration request (Herrero: paragraphs [0077], [0105], noted the re-register message).

Regarding claim 40, Herrero in combination with 3GPP discloses the apparatus according to claim 39, wherein the further message is configured to initiate a registration from the user equipment to the first network element (Herrero: paragraphs [0077], [0105], noted the re-register message).

Claim 44 is drawn to a computer readable medium configured to store instructions of a computer program that when executed controls a processor to perform steps of claim 1 above. Therefore, the same rationale applied to claim 1 applies. In addition, Herrero in combination with 3GPP inherently discloses a computer program product, i.e., given that Herrero /3GPP

discloses a process, the process would be implemented by a processor that requires a computer program product, e.g., a RAM, to function.

Claim 46 is rejected with the same reasons set forth to claim 13.

Claim 47 is drawn to a computer readable medium configured to store instructions of a computer program that when executed controls a controller to perform steps of claim 1 above. Therefore, the same rationale applied to claim 1 applies. In addition, Herrero in combination with 3GPP inherently discloses a computer program product, i.e., given that Herrero /3GPP discloses a process, the process would be implemented by a processor that requires a computer program product, e.g., a RAM, to function.

8. Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrero in combination with 3GPP in view of Costa-Requena (US 2004/0225878; Cited in PTO-892; Part of Paper No. 20080912).

Regarding claim 16, the combination of Herrero and 3GPP discloses a method according of claim 12 above, fails to specifically disclose wherein the information element indicates that the request is sent integrity protected.

However, Costa-Requena discloses wherein the information element indicates that the request is sent integrity protected (paragraph [0062], e.g., both authentication and message integrity protection is used).

Therefore, Herrero in combination with 3GPP and Costa-Requena as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to have the information element indicates that the request is sent integrity protected to provide

authorizations and authentication for an IP Multimedia Subsystem (IMS) (Costa-Requena: paragraph [0001]).

Regarding claim 18, the combination of Herrero and 3GPP discloses a method according of claim 12 above, fails to specifically disclose wherein the information element in the first message is an integrity protected flag in an authorization header of the first message.

However, Costa-Requena discloses wherein the information element in the message is an integrity protected flag in an authorization header of the message (paragraphs [0062], [0063]).

Therefore, Herrero in combination with 3GPP and Costa-Requena as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to have the information element in the message is an integrity protected flag in an Authorization header of the message to provide authorizations and authentication for an IP Multimedia Subsystem (IMS) (Costa-Requena: paragraph [0001]).-

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY PHAM whose telephone number is (571)270-7115. The examiner can normally be reached on Monday-Friday; 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Timothy Pham/
Examiner, Art Unit 2617

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit
2617